

ABSTRACT

A slider burnishing method is introduced, in which the slider is brought into a predetermined surface contact with the rotating disk for a specified period. The predetermined surface contact and the specified time period are selected together with the surface condition of the rotating hard disk, such that smoothened slider surface is abrasively formed. The smoothened slider surface is substantially parallel to the disk surface and thus provides reduced contact pressure during eventual operational contacting. In addition, the smoothened slider surface creates a constant gap together with the disk surface, which enhances the aerodynamic properties of the air bearing surface and stabilizes a small fly height.